

Abstract Submitted  
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**Nanosecond electrooptics of nematic liquid crystals: induced orientational order and quenching of director fluctuations**<sup>1</sup> VOLODYMYR BORSHCH, SERGIJ V. SHIYANOVSKII, OLEG D. LAVRETOVICH, Liquid Crystal Institute and Chemical Physics Interdisciplinary Program, Kent State University, Kent, 44240, OH — We demonstrate a fast (1-100 ns) electrooptic response of a thermotropic nematic liquid crystal in a geometry when a strong electric field ( $> 10^8$  V/m) does not realign the director and influences only the orientational order and the spectrum of director fluctuations.

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